

The Monday Effect on Stock Market

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Abstract:

The evidence of the Monday effect has been recognized since 1980 in Equity Markets all over the world. This study also tries to find out the significance of this phenomenon. For this reason, Karachi Stock Exchange is used. It is a major stock exchange of Pakistan. KSE was founded in 1949, it is a rapidly growing market for which very less number of researches have been reported. KSE is open five days a week and KSE all share Index is used for the research purpose. Dummy variable approach was used to investigate the case. Empirical results explain the evidence of Monday effect in Karachi stock market, moreover negative Monday returns are also observed.

Key words: Karachi Stock Exchange, Monday Effect

Introduction

In recent researches, it is reported that months, weeks and even days have a strong influence on stock market and its performance. Considering the days of the week, all the days including holidays have an impact on stock market and return. "Blue Monday" and "Friday Effect": Blue Monday refers to the concept that Mondays tend to be negative days for stock market and Friday Effect refers to the concept that Fridays tend to be positive impact overall. All these phenomena are positively or

negatively related to the stock market and returns.

Therefore in this paper, we evaluated those facts that determine either that Mondays are really blue or it is something different from our expectations. Hence this research guides investors and others, either they should take a risk to play with stock market or not.

Much research has been reported in this regard but there has not been so far any formal attempt to examine the Monday effect on the volatility of stock market returns on the Stock Exchanges of Pakistan. Nishat and Mustafa (2002) used Mean and Median approach to investigate the day of the week effect and they found no significant day of the week effect on stock exchange of Karachi; instead they found that trading volume on the first day of the week is very low as compared to the other days. Choudhry (2001) examined day of the week effect on returns and volatility of seven countries in Asia but Pakistan was not the part of it. Daily returns from South Korea, India, Malaysia, Taiwan, Philippines, Indonesia and Thailand were used for the period of 1990 to 1995 and GARCH model was used for practical research. The results suggested a substantial presence of the day-of-the-week effect on both stock returns and volatility although they are not equal in all countries. Major studies are also conducted in China, Malaysia, Singapore, India, USA and Turkey.

As a growing economy, the Pakistani stock market has been developing and escalating quickly recently. KSE (Karachi Stock Exchange)-100 index crosses 26000 basis points but it still needs improvement. A vigilant study of this anomaly in Pakistani stock market may deliver investor useful information in estimating stock strategies, it also helps policymakers in making their financial modifications policy. As Karachi Stock Exchange is in progressing state so there are chances of abnormal returns; this study helps the investor to fill this gap and can reduce the probability of earning abnormal profit. Furthermore this study will help students for better understanding of stock market and specially Monday Effect.

Literature Review

In 1931, this concept was first introduced by Fields. He reported that in the US stock market, there are negative returns on Mondays and positive returns on Fridays. However, in 1980, French reported lower return on Mondays, compared with other days of the week. Some other writers are also explaining the same phenomenon. In 1995 Moberly shows that financial practitioners were well aware of the Monday effect as early as the 1920s. However, the negative return on first day of the week still needs to be investigated.

The concept of Blue Monday was witnessed worldwide. In 1993, Chang, Pinegar and Ravichandran found significantly negative Monday returns in 13 to 23 international markets. Keim and Stambaugh (1984) have shown that United States returns on Monday are worse than the other days of the week. They also found that even if the market is opened on Saturday, it still has negative results on Monday. Negative returns on Monday were found by Tan and Tat in 1998, in 2000, in Singapore and by Choudhry, in Malaysia, Indonesia and Thailand. This anomaly has also been reported in India by Raj and Kumari, in 2006, by Holden, Thompsan, and Raungrit for Thailand in 2005, for Estonia and Lithuania by Ajayi, Mehdian and Perry, in 2004. These studies reveal that this effect is also present in Asian and European markets as well. Brazilian market is also in favor of negative Monday returns (Medureira and Leal 2001), but it was also noticed that no Monday effect occurred after 2002 in Brazil (Fajardo and Pereira 2008). Recently, Ke (2007) and Berument (2007) explained the existence Monday effect.

Rogalski (1984) found that Monday effect disappeared in the first month of the year which is January and returns became positive. However, the research conducted on the Japanese market opposed that idea of high return in January. Haris (1986), who inspects the intraday stock trading in New York Stock Exchange, came to the conclusion that day of the

week effect occurs within 45-mintues of the trading day and stock prices fall on Monday and rise in prices watched on other days. 45-mintues is well enough for the investor who has lots of money on stake. Haris (1988) also examined New York Stock Exchange for the 14-months period and suggested that negative Monday returns occur in trading time for small firms and negative Monday returns arisen on-trading time for the big firms.

Penman (1987) suggests that particular bad news, out after the closing of the stock market on Friday, helps clarify the negative Monday returns. Similar findings are reported by Damodaran (1989) who found that the firms that wanted to crack bad news, did that on Friday, but delay in this announcement till Monday produces uncertainty among the stakeholders and therefore, selling the shares after weekends, causes negative Monday effect. However the delay of announcement of bad news can only summarize little portion (approximately 3% to 4%) of the Monday effect.

Jaffe, Westerfield and Ma (1989), Sias and Starks (1995), Abraham and Ikenberry (1994), and Tong (2000) have identified that the investors who will buy or sell shares on Monday are based on returns of Friday, which is quite obvious because most of the investors have a thinking which anticipates that negative returns on Friday may lead to negative returns on Monday as well.

Kamara (1997) finds that Monday returns for large-organizations securities became different from other days of week and turn out to be positive as well. Positive Monday effect in the case of large organizations was reported by Liu, Brusa and Schulman (2000). Hui (2005) compares U.S and Asia Pacific stock markets and shows no significant proof of Monday effect except the Singapore stock market, so some positive aspects of Monday effect were also found in history.

There is strong evidence of Monday effect in history, sometimes the reverse Monday effect also occurred, but most evidences are in favor of Monday effect.

Data and Methodology

The data set used in this research consists of daily closing values of major stock market of Pakistan, Karachi Stock Exchange (KSE). Daily KSE All Shares Index is used for this purpose and collected data is from KSE website. The data covers a three year period from 1st January 2010 to 31st December 2013. KSE is open for five days a week, from Monday to Friday, other non-trading days being excluded from this period. The daily return for the KSE All Share Index is calculated as follows:

$$R_d = \log (L_d / L_{d-1}) \times 100 \quad (\text{i})$$

Where R_d is the daily percentage return on the KSE all Share Index on day d , L_d and L_{d-1} are closing values of the stock index on days d and $d-1$ respectively. Following Regression equation is used to estimate the Monday effect on KSE:

$$Y_d = \alpha + \beta D (\text{Monday}) + \varepsilon \quad (\text{ii})$$

Dummy variable approach is used for this purpose, which is based upon linear regression with dummy variable D referring to the 1st day of the week, dummy variable Monday assumes the value of 1 and other days have a value of zero overall. Y_d is daily returns as explained earlier; ε is error term and β is the coefficient. Consider if Karachi stock exchange shows a traditional Monday effect, then, i) the expected coefficient β is projected to be negative and statistically significant and ii) the Monday returns should also be significantly less than other days of the week. This equation is the simplest test to check the Monday effect on KSE.

Empirical Results and Discussion

Equation (ii) is estimated for the KSE all Share Index and the

projected parameters and related statistics are offered in the following table:

Variable	Coefficient	Standard Error	t-Statistic	Probability
DUMMY:	-0.001750	0.000787	-2.225315	0.0264
R-squared:	0.006639			

Table E-views Results for the Monday Effect

Generally a p-value is needed that is lower than 0.05 to show a statistically significant relationship between dependent and independent variable and t-stat value should be greater than 1.96 (for 95% confidence). T-values are obtained by dividing the coefficient by its standard error. The t-values also show the importance of a variable in the model. The results reveal that Monday effect is significant (t stats and p value), the p-value less than 0.05 which is 0.0264 and t value greater than 1.96 which is -2.225, but only 0.66% (R square) of variation in returns is explained on the basis of Monday effect, the rest is due to other variable and error term. Using the data from the table it is suggested that, i) the Monday effect, to the extent that it exists in the Karachi stock market ii) Karachi stock market returns are consistent with the weak form of the Efficient Market Hypothesis.

The study was conducted to check whether the Karachi stock exchange (KSE) illustrates Monday effect and whether it is moving towards weak form of efficient market hypothesis by using daily closing values of KSE for three years between 2010 and 2013. For this purpose, a dummy variable approach was used, which involves the use of regression equation. The results of the equation show that returns of the KSE are consistent with the Monday effect and support the weak form of efficient market hypothesis.

Findings showed that there was a minute Monday effect existent in KSE. In a previous study by Aly, Mehdian and Perry (2004), they found similar results after analyzing Egyptian market from 1998 to 2001. They found tiny Monday effect overall, proving weak form of efficient market hypothesis.

Implication

The results indicate that KSE exhibits Monday effect and weak form of market efficiency which in turn implies that investors can not earn risk adjusted excess return (alpha) just by extrapolating past trends. Technical analysis will not earn excess return rather a fundamental analysis of company financials can result in abnormal return for investors. While the results of the study reveal that market prices follow a random walk and market participants cannot benefit from market inefficiencies, any other studies show that analyzing past trends and projecting on the basis of these trends can result in abnormal returns.

Conclusion

This study specifies that there was a minute Monday effect in the Karachi Stock Market between 2010 and 2013, which is based on the statistical analysis conducted on Karachi all Share Index. Furthermore, it is observed that Monday returns are also lower.

Limitation and future research

This paper contains the data of three years that can be enlarged for better studies. Sample can also be increased as KSE is used for this research; in future, other stock exchanges of Pakistan can be used for a bigger sample. Furthermore, this study was conducted with reference to Pakistan; someone else can initiate the research for his/her own country as well. In this

case this research can be helpful for them. Due to time constraints, data observed was insufficient, more time if available would yield better results, and in future more data can be analyzed for similar research purposes.

BIBLIOGRAPHY:

- Ajayi, A., Mehdiان and J. Perry. 2004. "The Day-of-the-Week Effect in Stock Returns: Further Evidence from Eastern European Emerging Markets." *Emerging Markets Finance & Trade* 40(4): 53-62.
- Alagidede. 2008. "Day of the week seasonality in African stock markets." *Applied Financial Economics Letters* 4: 115-120.
- Aly, Mehdiان and J. Perry. 2004. "An Analysis of Day-of-the-Week Effects in the Egyptian Stock Market." *International Journal of Business* 9(3): 301-308.
- Batten, Sazilagyi. 2011. *The Impact of the Global Financial Crisis on Emerging Financial Markets*. 1st ed. United Kingdom: Emerald Group Publishing Limited.
- Berument and Kiyamaz. 2001. "The Day of the Week Effect on Stock Market Volatility." *Journal of Economics And Finance* 25(2): 181-1.
- Demirer and Karan. 2002. "An Investigation of the Day-of-the-Week Effect on Stock Returns in Turkey." *Emerging Markets Finance & Trade* 38 (6): 44-77.
- Draper and Paudyal. 2002. "Explaining Monday Returns." *The Journal of Financial Research* 25(4): 507-520.
- French, Kenneth R. 1980 "Stock Returns and the Weekend Effect." *Journal of Financial Economics* 13: 55-70.
- Kamath, R., Chakornpipat, and Chatrath. 1998. "Return Distributions and the Day-of-the-Week Effects in the Stock Exchange of Thailand." *Journal of Economics and Finance* 22(2-3): 97-106.
- Oguzsoy and Güven. 2003. "Stock returns and the day-of-the-

- week effect in Istanbul Stock Exchange.” *Applied Economics* 35: 951-971.
- Qiao, Qiao and Wong. 2011. “Examining the Day-of-the-Week Effects in Chinese Stock Markets: New Evidence from a Stochastic Dominance Approach.” *Global Economic Review* 40 (3): 251-266.
- Tsangarakis. V. 2007. “The day-of-the-week effect in the Athens Stock Exchange (ASE).” *Applied Financial Economics* 17: 1447–1454.
- Ushad. 2009. “Seasonality, returns and volatility on the Stock Exchange of Mauritius.” *Applied Economics Letters* 16: 545-548.
- Zhang and Li. 2006. “Do Calendar Effects Still Exist in the Chinese Stock Markets?” *Journal of Chinese Economic and Business Studies* 4(2): 151-163.